



image that correspond to black portions of said binary image, and calculates the color of a predetermined area of said input image based on said histogram.

5           4. An image processing apparatus according to claim 1, wherein said binarizing means further includes inversion means for inverting the binarized results.

10           5. An image processing apparatus according to claim 1, wherein the image in said predetermined area is a symbol image.

15           6. An image processing method comprising:  
a histogram calculation step of calculating a histogram that is consonant with an input image;  
a binary threshold value calculation step of calculating a binary threshold value, based on said histogram, with which a predetermined area in said input image is blurred;  
20           a binarization step of binarizing said input image using said binary threshold value; and  
a calculation step of calculating the color of said predetermined area of said input image based on the results obtained by said binarization means.

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7. An image processing method according to claim 6, wherein, by referring to a binary image obtained at

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a code for calculating a histogram that is
consonant with an input image;

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a code for calculating a binary threshold value,  
based on said histogram, with which a predetermined  
area in said input image is blurred;

a code for binarizing said input image using said  
5 binary threshold value; and

a code for calculating the color of said  
predetermined area of said input image based on the  
results obtained by said binarization means.

- 10 12. An image processing apparatus comprising:  
binarizing means for binarizing color image data;  
detection means for detecting a symbol area in  
said color image data;  
color reduction means for obtaining, from N colors  
15 that form a symbol in said symbol area, M colors that  
are equal to or smaller than N;  
symbol cutting means for performing a symbol  
cutting process for said symbol area; and  
color allocation means for allocating one of said  
20 M colors for each symbol cut unit that is obtained by  
said symbol cutting means.

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